

Date: Wednesday, 4/5/2006 3:29:49 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SADDLE FITTING, AFT (OUTBOARD/INBOARD)  
 Job Number : 26563  
 Estimate Number : 10534  
 P.O. Number : N/A  
 This Issue : 4/5/2006 S.O. No. : N/A  
 Prsht Rev. : NC  
 First Issue : N/A Type : MACHINED PARTS  
 Previous Run : 26499  
 Part Number : D2574  
 Drawing Number : D2574 REV E  
 Project Number : N/A  
 Drawing Revision : E  
 Material : N/A  
 Due Date : 4/24/2006 Qty: 4 Um: Each  
 Written By : See Comment Below  
 Checked & Approved By : 06.04.06  
 Comment : Est Rev: I As Per RevE 06-01-27 JLM

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6101005 7075-T7351 8.25X5.0X2.5



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)  
 7075-T7351 8.25X5.0X2.5  
 Make from D6101-005 billet for D2574  
 Ensure that grain is along 5.00" length  
 Batch No: B24069

SG/En 06/05/02 4

2.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1  
 Program Batch No. 26563 Double check by: SD

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets  
 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets  
 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets  
 4-Deburr and remove all machining marks  
 5-Tumble to remove sharp edges.

SG/En 06/05/02 x4

3.0 MILLING CONV. CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE  
 Machine keyway as per dwg D2573 & D2574

En 06/05/02 x4

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SG/En x4

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/05/11  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/04/04	2.3	Dim. 20" 0.125" is 0.106" offset on 4th axis too low. (3rd opp.) (1 part affected)	CP 06.05.04 PQS 042	Part OK per DS email	ED 06/05/05	2 06.05.04	CP 06.05.04 per PQS 042	2 06.05.04
06/04/04	2.3	Dim. 20" 0.125" is 0.100" offset on 4th axis too low (3rd opp.) First Run	CP 06.05.04 PQS 042	Part OK per DS email	ED 06/05/05	2 06.05.04	CP 06.05.04 per PQS 042	2 06.05.04

NOTE: Date & initial all entries

Date: Wednesday, 4/5/2006 3:29:49 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, AFT (OUTBOARD/INBOARD)

Job Number: 26563

Part Number: D2574

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SA 06-05-08

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

SAD 06-05-09

(4)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

a.m 06-05-09

(4)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

FC 06 05 09 (4)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST480

AP 06/05/10 (4)

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SD 06/05/11 (4)

Job Completion



u 06-05-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 26563
<b>Description:</b> Saddle, Aft Inboard	<b>Part Number:</b> D2574
<b>Inspection Dwg:</b> D2574 Rev. E	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				See Attached 1 E-mail	See Attached A22 email	3	4		
A	0.438	0.443	DT8682	0.440	0.438	0.438	0.438		
B	1.745	1.755		1.747	1.745	1.745	1.745		
C	3.495	3.505		3.498	3.498	3.497	3.497		
D	1.745	1.755		1.747	1.745	1.745	1.745		
E	7.990	8.010		8.005	8.006	8.005	8.005		
F	0.490	0.510		0.502	0.500	0.504	0.506		
G	0.257	0.262	DT8683	0.258	0.257	0.257	0.257		
H	0.375	0.380	DT8684	0.376	0.375	0.375	0.375		
I	0.490	0.510		0.498	0.498	0.499	0.498		
J	1.174	1.184		1.176	1.175	1.176	1.176		
K	0.558	0.578		0.569	0.564	0.564	0.569		
L	1.174	1.184		1.176	1.175	1.176	1.176		
M	1.365	1.375		1.368	1.367	1.368	1.368		
N	2.495	2.505		2.498	2.495	2.496	2.495		
O	4.119	4.129		4.119	4.119	4.119	4.120		
P	0.115	0.135		0.117	0.119	0.118	0.118		
Q	0.115	0.135		0.130	0.135	0.135	0.135		
R	0.240	0.260		0.243	0.250	0.248	0.249		
S	0.115	0.135		0.119	0.117	0.118	0.115		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.233	3.230	3.236		
V	0.230	0.250		0.232	0.230	0.230	0.230		
W	0.115	0.135		0.110	0.106	0.124	0.124		
X	0.307	0.312		0.309	0.310	0.309	0.310		
Y	0.760	0.765		0.765	0.765	0.765	0.765		
Z	0.352	0.372		0.362	0.370	0.370	0.366		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.620	0.620	0.620	0.624		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.243	0.241	0.244	0.242		
AE	1.500	1.520		1.508	1.511	1.512	1.513		
AF	0.115	0.135		0.132	0.135	0.135	0.135		
AG	0.240	0.280		0.265	0.260	0.260	0.260		
AH	0.240	0.260		0.244	0.240	0.241	0.242		
AI	2.000	2.020		N/A	N/A	N/A	N/A		
AJ	0.023	0.043		0.033	0.030	0.030	0.030		
Accept/Reject									

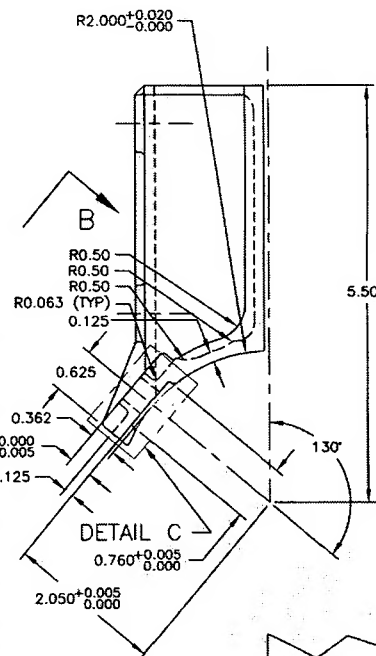
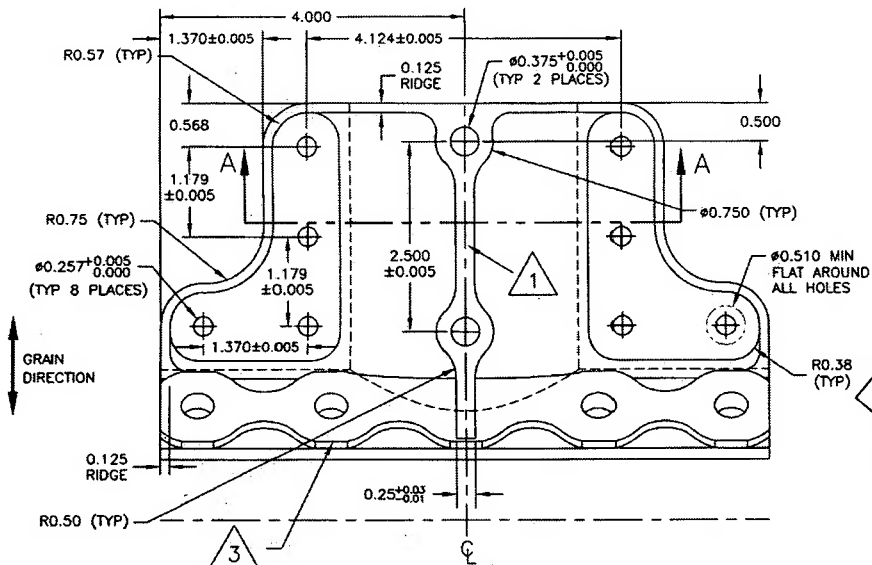
Measured by: J.G. / Ep
Date: 06/05/03

Audited by: J.L.
Date: 06/05/05

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

RELEASED

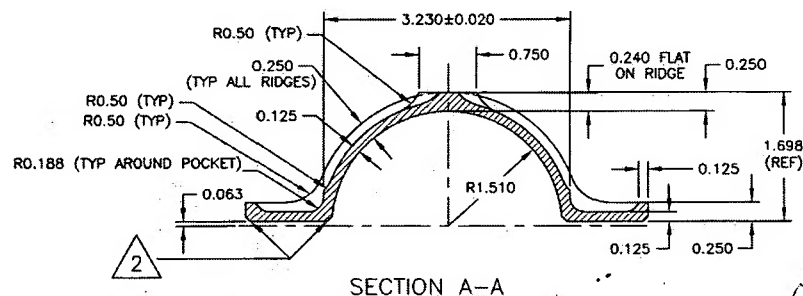
05.12.06



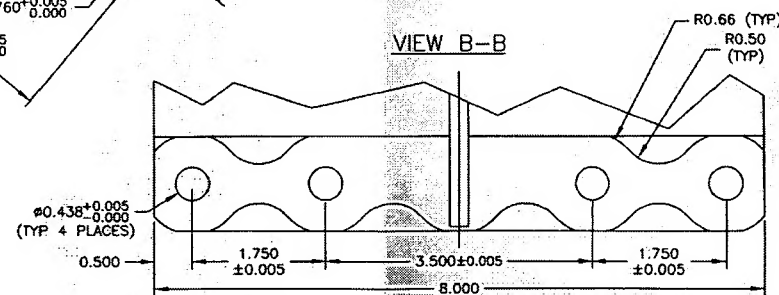
# NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)  
(REF DART SPEC. D6102-003)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF. 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 3 CHAMFER 0.063 x 45° ALL AROUND
- 4 CHAMFER 0.033 x 45° (SEE DETAIL C)

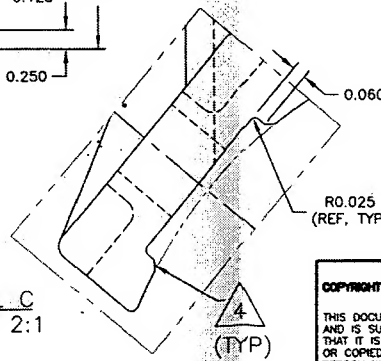


SECTION A-A



VIEW B-B

DETAIL C  
SCALE 2:1



E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES, TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED	PH	APPROVED PH
DATE	05.07.13	DRAWING NO. D2574
		TITLE INNER AFT SADDLE
		REV. E SHEET 1 OF 1 SCALE 2:3

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## Chris Provencal

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From: David Shepherd [davids@dartaero.com]  
Sent: May 4, 2006 4:45 PM  
To: Chris Provencal  
Subject: Re: NCR for D2574 saddle

Chris

For the reasons you have outlined below, I believe these saddles are acceptable.

David

----- Original Message -----

From: "Chris Provencal" <cprovencal@dartaero.com>  
To: <davids@dartaero.com>  
Sent: Thursday, May 04, 2006 2:36 PM  
Subject: NCR for D2574 saddle

> David,  
>  
> Two D2574 Saddles, thickness of saddle wall on skidtube should be 0.125.  
On  
> one it is 0.110", on another it's 0.106". Is this acceptable?  
>  
>  
> If it were the outside saddle, I would be keen on scrapping it, but  
because  
> its the inner saddle, that wall covers such a small area, I'm not sure if  
> its that significant?!?  
>  
> I attached a picture to show what dimension is affected  
>  
> Sincerely,  
> Chris Provencal  
> DART Aerospace Ltd.  
> Email..cprovencal@dartaero.com  
> Phone...613-632-3336  
> Fax.....613-632-4443  
>  
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